High Carbon Dioxide was investigated in order to study the storage-life extending of 'Rong-rein' rambutan. Rambutan were treated by high carbon dioxide 20 and 40% for 30, 90 and 120 mins. Storage at 13 °C, %RH 90-95. The result was show that the fruits were treated and untreated by carbon dioxide had storage life 10 and 8 days, respectively. In high relative humidity atmosphere, main cause of deterioration in rambutan by infected fungal. There were obviously infected by fungi introduced to fruits deterioration.